

Jewett (6)

THE EFFECTS OF
ALCOHOL AS A MEDICINE;

AN ESSAY READ BEFORE

The Fifth National Convention,

Held at Saratoga, August 1, 2, and 3, 1865.

BY CHARLES JEWETT, M.D.

The united and persevering efforts of all earnest friends of the Temperance Reform will fail to secure to it any considerable advance while alcoholic liquors of almost all known varieties are daily prescribed by three fourths of the medical faculty in all sections of our country, not in rare and exceptional cases of disease, but in a vast majority of the cases they are called to treat where there is evidence of diminished vitality in the system, as a whole, or in important organs whose functional activity can not be long impaired without producing general prostration. No one at all familiar with the vagaries of the profession will assume that because the mass of its members just now favor a stimulating practice, that therefore it must necessarily be needful or right, for thirty years since a practice directly the opposite was almost universal, and depletion by the lancet and all other available means was resorted to quite as generally as is now the resort to the use of stimulants. The lancet has, however, given place to Bourbon whisky, drastic purgatives to ale or lager beer, and antimonials to wines, quinine, and beef tea. As an apology for this complete revolution in medical practice we are often told that diseases have changed their type or that the constitutions of the people have changed. The laws of God, which govern in the wonderful phenomena of life, in the sustenance, growth, and healthful action of the various organs of the human body, and in the development and cure of disease, *have not changed*. They are now what they were in the days of the Patriarchs, and to attempt to reconcile the public to such a complete somerset in medical practice by such an explanation, is to insult the human understanding. The real facts we believe to be these. The pathology of many diseases is not well understood, the action of many drugs long in use an unexplained mystery, and the treatment of many forms of



disease, constantly multiplying through the united influence of hereditary taint and bad personal habits, is necessarily empirical or experimental. Medicine can not yet be reckoned among the exact sciences, and the very respectable class of gentlemen who study, profess, and practice it, while feeling their way, not always with sufficient care, toward the truth or toward a true preventive or remedial system, are influenced like other men by popular opinion and fashion. They have their professional fashions or hobbies, and these follow each other in pretty regular succession. Almost every potent drug has, within the last two centuries, enjoyed its season of excessive popularity. In process of time it is compelled to yield the club to the next Hercules, and quietly takes its place in some subordinate position on the shelf of the apothecary. There, Veratrum Viridi succeeds Digitalis; here, Bourbon Whisky walks triumphantly in the footsteps of its illustrious predecessor, Cod Liver Oil; and Podofiline, even now, threatens to push King Calomel from the throne, no son of Mercury perhaps succeeding.

It requires about as much nerve and resolution for a physician, especially in village or country practice, to ignore the prevailing medical fashion, as for a *lady* to disregard the fashion in the arrangement of her dress or the style of her bonnet.

If the reigning medical fashion be to stimulate freely, and Dr. A—— should suffer a patient to die without the help of brandy, his chance is small for another patient in that neighborhood, especially if he happen to have, as a competitor for practice, an unscrupulous medical brother, who will give the gossips of the neighborhood a timely hint, that the man died in consequence of a *failure of the vital powers* [an undoubted fact], while brandy is reputed capable of reinforcing them.

Even a fair and temperate statement of the extent to which alcoholic liquors are now prescribed by a majority of the medical men of the country, would severely tax the credulity of the public who may have taken no special pains to learn the facts in the case. As a prophylactic, they are extensively employed, while there is not a particle of reliable evidence that they ever contribute in the smallest degree to prevent the injurious action of an impure atmosphere, bad water, or sudden and great changes of temperature. Scores of distinguished medical men who have practiced for many years in tropical climates, have in their published works borne testimony to the truth I have just stated. Bad as alcoholic stimulation is in cold climates, it is infinitely worse in tropical ones.

Again, alcoholic liquors are extensively prescribed as adjuncts to tonics, and a generous diet in almost all cases of general debility, and as needful support in long-continued and exhausting fevers. If, happily, the patient live, in spite of the fever and the alcoholic poisons administered during its continuance, and convalescence be fairly established, he is again subjected by many practitioners to the influence of stimulants with a view to hasten recovery; and just here an amount of mischief is done which can scarcely be estimated, for, in thousands of instances all over the land, the patient thus



treated contracts a fondness for the stimulant, and although comparative health returns, he goes right on in the use of alcoholics, and in many deplorable cases is soon numbered among the drunkards of that community.

As an aid to digestion in dyspepsia—as a stimulant in cases of shock, as by blows, falls, or severe wounds—as aids to the process of lactation in the cases of nursing women—to prevent the waste of tissue in consumptive cases—to excite the nerves of the phlegmatic, or, as a narcotic, to quiet the nerves of the irritable—for all these purposes alcoholic liquors are daily prescribed, with apparently an utter forgetfulness of the fact, that our public charitable institutions and prisons are crowded with the wrecks of men ruined by the habitual use of these much-lauded medicines, and that the hearts and homes of thousands and tens of thousands all over the land are filled with unutterable anguish as a direct result of their use.

Dr. Beaumont, of England, has, in a few brief sentences, indicated what I am disposed to regard the chief cause of the delusion which prevails among medical men on this subject.

"The narcotic action of alcohol is the cause of its being misused. It is found in some cases to relieve pain for the time, and it is therefore often resorted to as a palliative when a more curative remedy should be employed. It may give temporary relief, however, but only for a time conceals the malady without removing it. On this account its action should be carefully watched by the physician when he prescribes it, lest the appearance of relief delude him into the supposition that the disease he is contending with is removed when it is only concealed. Many chronic diseases are thus 'glossed over' and run on to an ultimately fatal issue, when the discontinuance of alcoholic liquors would enable their latent operations to be read in their appropriate symptoms, and so admit of treatment and probable cure."

That an agent which can so act on the brain and nervous system of a healthy man, as to make him, for the time, forget his cares, sorrows, and obligations, and laugh, sing, and shout, while his mother, wife, or child is dying in the next room, should produce a feeling of relief or present comfort when administered to the sick might be anticipated, but to conclude therefrom that brandy is the true remedy for the disease under treatment, would be as irrational as to conclude from the facts *before* stated, that brandy is the true and best source of consolation for the bereaved and the sorrowing. The character of a " mocker," a deceiver, adheres to alcoholic liquors *when and wherever* they come in contact with the brain and nerves of man, and that fact must be constantly borne in mind, or we shall continue to be misled by them as millions have been in the ages past.

The real value of alcoholic liquors as medicinal agents can not be fairly estimated by considering their immediate effect distinct from later results which are sure to follow. The studious and thoughtful, both in and outside the medical profession, will be greatly aided in estimating the value of alcoholics for any and all purposes by con-

sidering the results of investigations, some of them quite recent, made in England and France, a knowledge of which have not yet reached the public generally this side the Atlantic, through the ordinary channels of information.

Dr. Michel Levy, in a Treatise on Hygiene published in Paris in 1857, says:

"The influence of alcohol upon the nervous system, and particularly upon the brain, is manifested by a progressive but constant series of symptoms, which, in different degrees of intensity, are reproduced in all individuals. These constitute a *true poisoning*, and this morbid state is exhibited under three phases: 1, sub-excitation; 2, perturbation; 3, abolition of the cerebro-spinal functions."

Dr. Edward Smith, F.R.S., performed in 1859 a series of experiments, recorded in the Philosophical Transactions of the Royal Society, illustrating the mode of action of alcohol. The following are among his conclusions:

"Alcohol is probably not transformed, and does not increase the production of animal heat by its own chemical action."

"It interferes with alimentation. It lessens the salivary secretion, and must therefore impede the due digestion of starch."

"It greatly lessens muscular tone and power."

"There is no evidence that it increases nervous influence, while there is much evidence that it lessens the nervous power, as shown by its action on the mind and muscles."

"The dose only effects the *degree*, and not the *direction*, of its influence."

"Alcohol is not a true food, as it neither warms nor *sustains* the body by the elements of which it is composed."

The experiments of Dr. Smith just referred to, were followed by a most thorough investigation of the subject in France, set on foot through the action of the National Academy of Medicine, and conducted by Professors Lallemand and Perrin, assisted by the eminent chemist Duroy.

No investigation previously made has damaged the reputation of alcohol to an equal extent. Some idea of the importance of the report which embodies the results of their investigations may be formed from the following brief summing up of the matter by Perrin, one of the French committee. It occurs in a reply of his to the strictures of an English reviewer.

1st. "Alcohol, contrary to what happens with alimentary substances (food), sojourns in the blood as a *foreign body*.

2d. "Unlike them, it is expelled from the system *unaltered* through the various channels of elimination (lungs, skin, and kidneys). This elimination commences almost immediately after the ingestion, is constant, whatever be the quantity absorbed, and continues as long as the blood and organs remain impregnated with alcohol.

3d. "Alcohol undergoes no transformation within the economy (the body), and furnishes no product of oxidation.

4th. "It betrays its presence by certain special effects, which are

always of the same *kind*, and may acquire such an intensity as to become rapidly fatal.

5th. "It *accumulates* in certain organs (the brain and liver) which for equal weights constantly contain more of it than does the blood."

From a resumé of the argument in the French report, on page 229, we add the following:

"Muscular power is always weakened by the presence of alcohol in the system, beginning with the extremities, and extending ultimately (where the dose has been sufficient) to the centers, the heart being the last to die."

"Death by alcoholic poisoning is due primarily to its special action on the nervous centers."

"After the introduction into the stomach of a very small dose of brandy—only 360 grains—the blood continued to manifest its presence for many hours, being tested by chemical reagents. Alcoholized blood contains during life and after death a great number of free fatty globules, visible even to the naked eye."

From a recent work, entitled, "Life and its Renewal," by a distinguished English physician, Dr. T. K. Chambers, we make the following extract:

"What is a stimulant? It is usually held to be something which spurs on an animal to a more vigorous performance of its duties. It seems doubtful if on the healthy nervous system this is ever the effect of alcohol, even in the most moderate doses and for the shortest periods of time."

Again: "It is clear that we must cease to regard alcohol as in any sense an aliment, inasmuch as it goes out of the system as it went in, and does not, so far as we know, leave any of its substance behind."

He says: "To recapitulate—we think that the evidence, so far as it has yet gone, shows the action of alcohol upon life to be consistent and uniform in all its phases, and to be always exhibited as an arrest of vitality."

"The most special exhibition of disease from its use is in the special function of the nervous system, the *life of relation*,* to perform the duties of which the devitalized nerve becomes inadequate."

It is certainly pertinent to inquire, just here, what alcoholic liquors can do for the human body in a state of disease, if the distinguished medical gentlemen whose opinions I have quoted do not greatly mislead us as to the relation of those agents to the human constitution in a state of health. They can not afford it nutriment in a state of exhaustion; they can not serve as an antidote to any known toxic or poisonous agent which may have been introduced from without in connection with the inbreathed atmosphere through the lungs, or received into the stomach with food or otherwise, or by absorption through a wound or an abraded surface. They can not

* A cabbage is not aware of the immediate presence of kindred plants. It has no delightful relations with them. *It has no nervous system.*

supply, as do mineral waters, important ingredients of the blood or solid structures which may be at the time wanting or deficient in the system, such as iron, phosphoric acid, sulphur, lime, and the like. They can not neutralize in the system or aid in the elimination from it of waste or effete matters resulting from the disintegration of the tissues, and which may have accumulated through defective action of the excretory organs.

We may select from our *materia medica* articles capable of producing either of the results I have named, but alcohol is not one of them. What desirable result, then, can the physician promise himself and his patient, with any degree of confidence, from the administration of alcohol in any of those forms or mixtures in which it is or may be employed as medicines?

1st. In cases of extreme and sudden prostration, resulting from falls, blows, extensive scalds, profuse hemorrhages, or whatever cause, where there is present danger of a fatal faint or stoppage of the circulation, alcohol may—administered in small doses to those *who have not been accustomed to its use*—excite reaction or an increased movement of the vital machinery, and thus avail for good, while more permanent restoratives are applied to the support of the sufferer. A sudden dash of cold water in the face or the introduction of the sharp, acrid vapor of ammonia into the nostrils—both suggestive to the vital forces of suffocation—will often act in a similar way. The period during which alcohol can be made to serve any good purpose in the way suggested as a mere stimulant, it will be at once perceived, must be very brief, and the amount employed small in constitutions unaccustomed to its presence.

2d. It may afford temporary relief from pain and spasm in cases where from any cause the sensibilities have been unduly exalted. As a narcotic or an anesthetic agent, closely akin to chloroform and ether, alcohol, carefully administered, can and often does produce desirable results of the character indicated. In spasmotic asthma, in cases of disturbances of the alimentary canal, caused either by exposures to cold, or more frequently by the passage of ill-digested or crude materials over the mucous surfaces—in these and other kindred cases alcohol may, as an anesthetic, render the condition of the patient more tolerable, while a return to the normal state is secured by *time* and the *remedial efforts* of the vital forces, or by the action of medicines more safe and permanent in their results than those which produce a partial destruction of the sensibilities. There are other agents with which the desirable results named may usually be accomplished with nearly as much certainty, if not so rapidly, as with alcohol. Warm baths, or local applications of heat; opium in some of its forms, or some kindred narcotic; or, in urgent cases, even the moderate and careful inhalation of ether; but apart from the tendency to the formation of intemperate habits from the use of alcohol, these have no advantage that I am acquainted with over that article, judiciously administered. The temporary relief which stimulants, so called, afford to dyspeptic patients; to those afflicted with organic disease of a very painful

character, external or internal; in cases of severe external injuries inflicted by mechanical or chemical forces, and in the treatment of asthmas, colic, and the like, is doubtless referable to the *anesthetic* character of alcohol.

While it may be allowable for a cautious physician to secure to his patient immediate though temporary relief from suffering by the narcotic influence of alcohol or opium, it seems to us neither consistent with philosophy, experience, or common sense to look to such agents for the permanent cure of any serious form of disease known to us.

That eminent surgeon and author, Professor Miller, of Edinburg, Scotland, is reported to have remarked, in a public discourse, a short time before his death, "Alcohol, gentlemen, *cures* nothing—it covers up a great deal."

The confirmed drunkard secures to himself, with each returning day, temporary relief from suffering by the use of alcohol, or, if that is not to be had, with opium; but so far from doing the work, in his case, of a real curative agent, it *intensifies* the real disease with which he is afflicted, of which it was, in fact, the primary cause. Some very able men of the medical profession, of large experience, decline to avail themselves of the use of alcohol even as a palliative, asserting that they have found reliable substitutes for it in all cases. Among the most distinguished of these are Doctors Mudge, of Bodmin, and Higginbottom, of Nottingham, England. If the result of further and careful observation shall lead to the general exclusion of it from the sick room, in *this* as well as other countries, the most serious obstacle to the advancement of the Temperance Cause will have been removed. We may not look for aid, while laboring in that direction, to men who make a mere trade of their profession, and who, reckless of the influence of their example, habitually indulge themselves in the use of narcotics—blunting their sensibilities, and saturating their tissues with opium or the oil of tobacco, until they fumigate every sick room they enter, *ad nauseam*, or who patronize drinking saloons and bar-rooms as regularly as any common loafer; but may we not hope from the well-educated, moral, Christian, and progressive portion of the medical profession, a careful revision of the whole subject we have briefly considered, in the steadily increasing light of true science and experience, accompanied with an earnest zeal for the elevation, health, purity, and happiness of the human race?

At the conclusion of the essay a resolution was adopted referring the paper to the following committee of five medical men for the purpose of presenting appropriate resolutions: Prof. A. B. Palmer, Mich.; Dr. S. Stebbins, Penn.; Dr. L. Sheldon, Vt.; E. C. Delavan, N. Y.; Rev. J. J. Dana, Mass.

Adjourned.

EVENING SESSION.

Prof. A. B. PALMER, of Mich., chairman of the committee appointed on Dr. Jewett's essay, submitted the following resolutions:

Resolved, That we regard the paper presented by Dr. Jewett on the use of alcoholic stimulants a very able one, and would recommend its publication.

Resolved, That while this Convention, composed largely of non-medical men, does not presume to judge critically of questions of a strictly medical character, and while it particularly does not deny the powers of alcohol and alcoholic liquors as medicines in certain cases, any more than it denies the power of other articles of the *materia medica*, such as opium, quinine, or arsenic; yet, in view of the incalculable evils arising from the use of such liquors in health, and the great danger of habits of intemperance being established by their frequent use for medicinal purposes, this body, assembled from different parts of our country, for the sole purpose, and with an anxious desire, to arrest those evils, respectfully, but earnestly, request the members of the medical profession to carefully reconsider the subject of so freely prescribing these drinks as is now the prevailing fashion, especially in chronic cases and in slight ailments, and to substitute other articles so far as the interests of their patients will allow.

Resolved, That this Convention begs of medical men, in arriving at conclusions on this subject, to consider the remote as well as the immediate effects of their prescriptions, and their effect upon the moral and social as well as the physical conditions of their patients.

Resolved, That the growing evils of intemperance at the present time induce this body to resort to every proper measure to abate them, and induce this appeal to the members of a profession for which it has great respect, knowing they have immense power and commensurate responsibility in molding public sentiment and practice in the use of alcoholic beverages.

Resolved, That these resolutions be signed by the officers of this Convention, and sent, with a request for publication, to each of the medical journals in the country.

Prof. PALMER, in an eloquent speech, advocated the sentiments expressed in the resolutions.